Chapter 1
Introduction

1.1 Overview

This Stormwater Quality Improvement Plan (SQIP) describes the stormwater pollution prevention efforts to be implemented either jointly or individually by the County of Sacramento and the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt and Rancho Cordova. Those agencies, collectively referred to as the Sacramento Stormwater Quality Partnership (Partnership), developed the SQIP to protect local waterways and fulfill regulatory requirements, as described later in this chapter.

The SQIP outlines Partnership priorities and activities planned for the 2008–2013 permit term. It also includes background information to provide readers with an understanding of the environmental and regulatory context as well as the Partnership's past accomplishments.

This SQIP supercedes and replaces all previous management plans developed for the Partnership, including the 1994 Comprehensive Stormwater Management Plan, the 1995 Effectiveness Evaluation Plan, the July 2003 SQIPs and their amendments, and the draft 2007 SQIPs.

1.2 Background

This section briefly discusses background for the SQIP, including the environmental need and regulations driving the effort, information on the Sacramento Stormwater Quality Partnership, and a description of the area subject to the regulations. Additional details are included in the appendices.

Environmental Need

Creeks and rivers are a vital environmental and community resource, and their health depends on good water quality. One of the ways that pollutants can enter water bodies is through stormwater runoff. When land is developed, vegetation is replaced with impervious surfaces such as streets and rooftops; when it rains, water can no longer soak into the ground to the extent it previously could, and instead becomes stormwater runoff. Urban areas also generate what is referred to as dry-weather urban runoff (also called nuisance flows)—runoff from irrigation water and wash water, rather than from rain.

Runoff collects pollutants as it flows along the ground surface. Streets and other auto-related areas accumulate sediments and other contaminants such as metals, oils and petroleum hydrocarbons. Urban runoff itself may also contain pollutants. For example, runoff from lawn or garden watering may carry pesticides, fertilizers or sediment. Runoff from vehicle and equipment washing typically carries detergents and other pollutants. The pollutants that are potentially exposed to/picked up by runoff vary depending on land

use and activities. Table 1.2-1 shows the typical pollutants associated with different land uses and associated activities.

In developed areas, runoff flows into gutters, stormwater pipes (called storm drains) and channels, which—in the Sacramento area, discharge directly into creeks and rivers, along with any pollutants washed away with the runoff. Development also affects creeks by changing the volume and flow rate of water that flows into the creeks; the increased flows can cause erosion, degrade the creek habitat and also increase flood risks. Studies have demonstrated that runoff from the frequent small storms can cause downstream erosion, sedimentation and habitat impairment. Conventional flood detention approaches seek to manage (detain and slowly release) runoff associated with major storms, but do not address the runoff flows that cause chronic erosion and habitat impacts.

Table 1.2–1
Typical Pollutants Associated with Urban Land Use Activities

Land Use Type	Activities	Typical Pollutants
Residential	• Landscape/yard maintenance • Car washing • Car maintenance (e.g., oil changing) • Painting and remodeling • Contaminants, storage and disposal of household chemicals and hazardous/non-hazardous wastes • Pet management	Pesticides, herbicides, fertilizers, concrete waste, landscape debris, detergents, oil and grease, solvents, paints, and other household wastes Note: Excess runoff from over watering is a problem, since this water carries additional pollutants to local creeks and rivers
Commercial/ Light Industrial	• Landscape maintenance • Outdoor (exposed) loading areas • Outdoor (exposed) material and equipment storage • Public parking areas • Painting and remodeling • Contaminants, storage and disposal of household chemicals and hazardous/non-hazardous wastes	Pesticides, herbicides, fertilizers, detergents, oil and grease, solvents, paints, metals, sediments/gravels (from landscape and parking areas) and other wastes
Heavy Industrial	• Outdoor (exposed) loading areas • Outdoor (exposed) material and equipment storage (including aboveground storage tanks) • Outdoor (exposed) manufacturing/ processing areas • Fueling areas • Facility Maintenance • Vehicle and equipment washing, maintenance, and/or parking areas • Contaminants, storage and disposal of household chemicals and hazardous/non-hazardous wastes	Oil and grease, hydraulic fluids, petroleum hydrocarbons, solvents, metals, sediment/gravel, detergents and other materials, and wastes used at the facility
Construction Sites	• Clearing and grading • Concrete and asphalt work • Painting • Dewatering activities • Exposed storage of materials on-site • Landscaping • Pool construction/repair	Sediment/gravel (from eroded surfaces or stored materials), concrete slurry, paints, oil and grease, hydraulic fluids, petroleum hydrocarbons, pesticides, herbicides and fertilizers, contaminated pumped groundwater, and other waste materials

Land Use Type	Activities	Typical Pollutants
Transportation Corridors	• Continuous automobile, truck, and bus use • Utility company trenching and construction activities • Road repair and resurfacing activities • Roadside vegetation maintenance • Truck spills	Oil and grease, hydraulic fluids, petroleum hydrocarbons, metals (e.g., copper, lead, zinc) sediment/gravel, pesticides, herbicides and fertilizers, spilled waste materials
Parks and Recreational Areas (includes golf courses)	• Landscape maintenance • Use by pets and livestock	Fertilizers, herbicides, pesticides, sediment/gravel, landscape debris, fecal waste (bacteria/pathogens)

Regulatory Background and the Stormwater Permit

The federal Clean Water Act (CWA) makes municipalities responsible for regulating and managing the quality of stormwater runoff throughout their jurisdictions, since municipalities own and operate the storm drain pipes and drainage channels that collect runoff prior to its discharge into creeks, rivers, and other water bodies.

Under the CWA, stormwater discharges are regulated through National Pollutant Discharge Elimination System (NPDES) stormwater permits. In California, the State Water Board and its nine Regional Water Boards have been authorized by U.S. EPA to oversee implementation of the Clean Water Act. The Central Valley Regional Water Quality Board (Regional Water Board) issues and enforces NPDES municipal stormwater permits in the Sacramento area.

The County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt and Rancho Cordova are subject to the Sacramento Areawide NPDES Municipal Stormwater Permit (NPDES No. CAS082597; Order No. R5-2008-0142) (Stormwater Permit), issued by the Regional Water Board in September 2008 and covering the period November 2008 –September 2013. The Stormwater Permit was issued originally in 1990 and has been reissued several times since. The Stormwater Permit (Provision A) states:

1. Discharges from municipal separate storm sewer systems (MS4s) in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance as defined in § 13050 of the California Water Code are prohibited.

2. Discharges from MS4s which cause or contribute to exceedances of receiving water quality standards and water quality objectives (designated beneficial uses of the Basin Plan[1] and water quality objectives developed to protect beneficial uses) for surface water or ground water are prohibited.

3. Discharges from MS4s containing pollutants that have not been reduced to the maximum extent practicable (MEP) are prohibited.

In addition, the Stormwater Permit contains specific requirements related to:

[1] The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan). See Appendix 1B for additional discussion about the Basin Plan.

- Reporting and other project management functions
- Reducing specific target pollutants
- Monitoring and conducting special studies
- Reducing stormwater impacts from new development projects, construction projects, municipal operations and commercial/industrial businesses
- Conducting public outreach and watershed stewardship
- Preventing illicit discharges
- Assessing program effectiveness

This SQIP proposes compliance activities to be conducted during the five-year term of the Stormwater Permit. As specified in the permit, once the SQIP is approved by the Regional Water Board Executive Officer, it is considered part of the permit and is enforceable as such.

The current Stormwater Permit differs from the prior one in several notable ways:

- Many of the requirements are more general (less prescriptive) than in the prior permit; this SQIP provides the details.
- The permit includes requirements pertaining to protecting creeks from erosion and other harm caused by increased runoff volume and flow rate (hydromodification) due to new development and redevelopment. The permit requires that the Partnership develop a plan to mitigate hydromodification impacts associated with new development/redevelopment, and this is expected to result in new requirements for some new development projects (see sections 2.2 and 3.8 for additional details).
- It requires a modest amount of additional monitoring (in addition to the existing extensive monitoring program) to learn more about discharges of pyrethroid insecticides and mercury, which are impairing water quality in various local waterways. The data could lead to new understanding on how to control these pollutants and eventually to additional requirements amended to the Stormwater Permit.

The Stormwater Permit is attached to this SQIP as Appendix 1A, and a more complete discussion of the regulatory background is included in Appendix 1B.

Sacramento Stormwater Quality Partnership

The Sacramento Stormwater Quality Partnership (Partnership) is a collaboration of all the agencies subject to the Sacramento areawide Stormwater Permit. The Partnership's main charge is to oversee compliance with the Stormwater Permit, and it works to protect and improve water quality in local waterways for the benefit of the community and the environment. Refer to Appendix 1C for a complete history of the permit and the Partnership's efforts to manage urban runoff quality over the years. This SQIP describes the Partnership's planned activities for the 2008–2013 permit term.

Permit Area and Associated Waterways and Watersheds

The Stormwater Permit does not apply to all areas within Sacramento County. Rather, it applies to all the land inside the Sacramento County Urban Service Area boundary, as well as the Sacramento International Airport and the land within the City of Galt's 2030

General Plan boundary, as shown on Figure 1.2-1. Land within the Urban Service Area includes the cities of Folsom, Citrus Heights, Elk Grove, Rancho Cordova, and Sacramento, and parts of unincorporated Sacramento County.

Sacramento County lands outside of the Urban Service Area, to which the Stormwater Permit does not apply, include Isleton (very small community not subject to NPDES regulations) and Rancho Murieta (covered by a separate Phase II NPDES general permit*).* The urbanized areas in Yolo, El Dorado, and Placer Counties which are contiguous with the greater Sacramento area are permitted separately by the Regional Water Board (also under the Phase II NPDES general permit).

The storm drain system within the Stormwater Permit area includes a constructed system of storm drain inlets, pipelines, open channels, detention basins, and roadside ditches that discharge for the most part into various local creeks and the American and Sacramento Rivers. For the City of Galt, the storm drain system discharges to various local creeks which flow to the Cosumnes River, a tributary to the Mokelumne River. All the rivers ultimately drain to the Sacramento-San Joaquin Delta and from there to the San Francisco Bay and the Pacific Ocean.

As indicated on Table 1.2-2 and shown on Figure 1.2-2, the permit area includes all or part of a number of watersheds. A watershed is defined as the land area that drains into a given body of water. The size of a watershed depends on the water body; large watersheds (for example for a river) include smaller watersheds (for example for tributary streams) within them. The permit area is largely contained within the American and Sacramento Rivers watersheds, described below:

American River Watershed – The permit area includes part of the watershed for the American River, which begins in the Sierra Nevada Mountains and eventually flows into the Sacramento River. The City of Folsom, and parts of Rancho Cordova, Sacramento and the unincorporated Sacramento County are in this watershed.

Sacramento River Watershed – The majority of the permitted area is located within a portion of the Sacramento River watershed, the largest watershed entirely in California. The 447-mile long Sacramento River flows south from near Mount Shasta until it empties into the San Joaquin River in the Sacramento River Delta.

Figure 1.2-2 shows the approximate boundaries for the active watershed advocacy groups in the permit area and indicates permittee involvement in the various watershed stewardship programs. Refer to Chapter 2, Section 2.6 for additional discussion about the watershed groups and their activities.

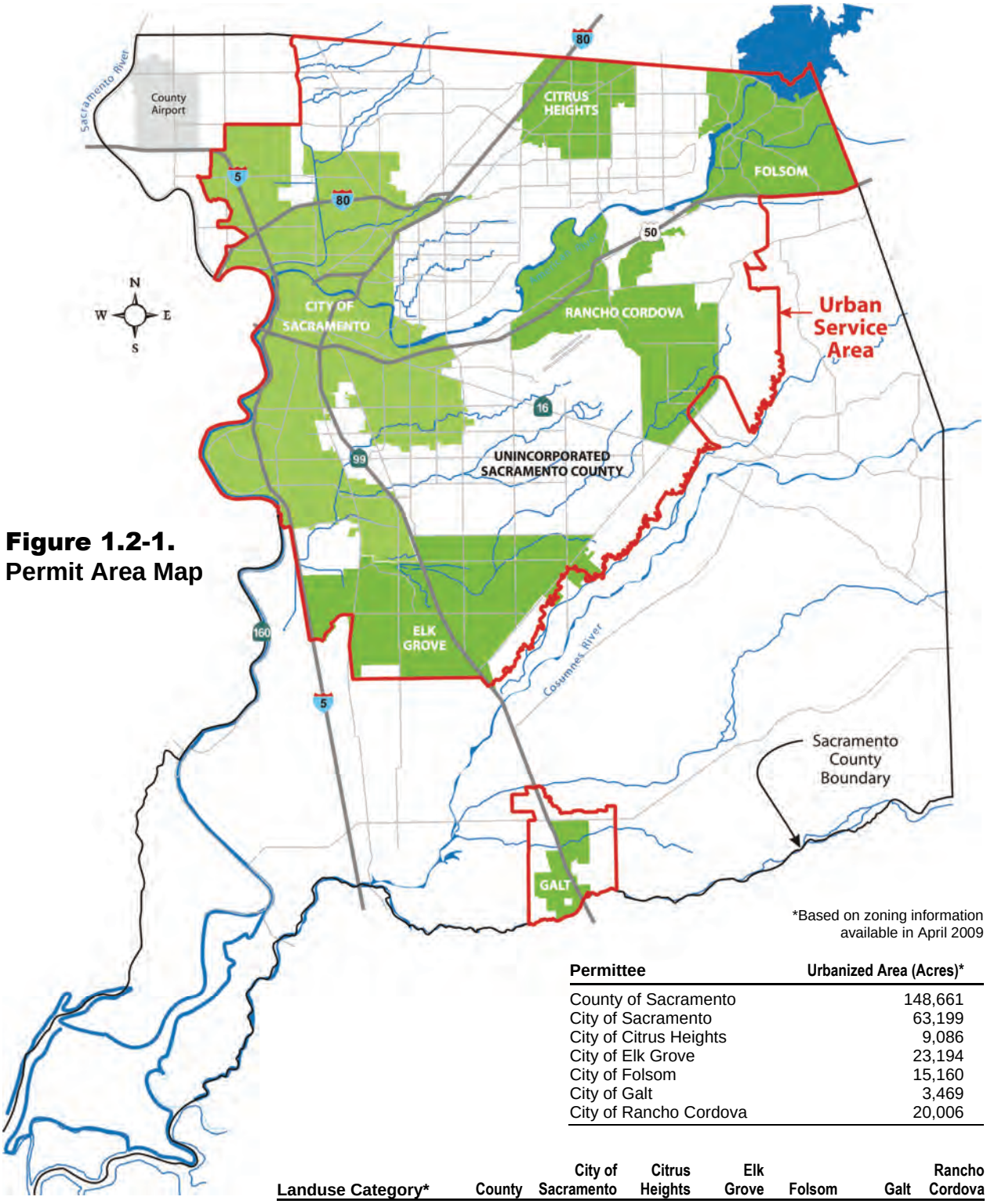

Figure 1.2-1.
Permit Area Map

*Based on zoning information available in April 2009

Permittee	Urbanized Area (Acres)*
County of Sacramento	148,661
City of Sacramento	63,199
City of Citrus Heights	9,086
City of Elk Grove	23,194
City of Folsom	15,160
City of Galt	3,469
City of Rancho Cordova	20,006

Landuse Category*	County	City of Sacramento	Citrus Heights	Elk Grove	Folsom	Galt	Rancho Cordova
Residential	33%	55%	63%	74%	46%	59%	53%
Commercial	4%	17%	8%	10%	8%	15%	14%
Industrial	10%	2%	OC	4%	5%	7%	6%
Institutional	OC	9%	6%	2%	10%	7%	6%
Major Roads/Freeways	OC	5%	15%	3%	OC	OC	OC
Parks and Open Space	10%	11%	2%	7%	22%	4%	21%
Agricultural	20%	0%	0%	0%	0%	8%	0%
Other/Miscellaneous	24%	1%	6%	0%	9%	0%	0%

OC = included in other land use categories

Table 1.2-2
Sacramento Area Watersheds

Watershed	Watershed Acreage	Development Status	Primary Land Use
Alder Creek	7398	Undeveloped	Mixed
Arcade Creek	6477	Developed	Mixed
Beach-Stone Lakes	40118	Mixed	Residential
Buffalo Creek	8855	Undeveloped	Industrial
Carmichael Creek	2715	Developed	Residential
Chicken Ranch Slough	3613	Developed	Mixed
Cripple Creek	4367	Developed	Residential
Dry Creek	4161	Mixed	Residential
Elder Creek	7873	Mixed	Mixed
Elk Grove Creek	4300	Mixed	Residential
Fair Oaks Stream Group	7681	Developed	Residential
Florin Creek	2829	Developed	Commercial
Hagginbottom	2606	Developed?	Residential
Laguna Creek	41600	Mixed	Mixed
Lake Natoma	485	Mixed	Rec-Residential
Linda Creek	3630	Mixed	Ag-Residential
Magpie Creek	3727	Developed	Industrial
Manlove	1968	Developed	Mixed
Mayhew Slough	2956	Developed	Mixed
Morrison Creek	34530	Mixed	Mixed
Natomas Basin	26449	Undeveloped	Mixed
Steelhead Creek aka Natomas East Main Drainage Canal (NEMDC)	1897	Undeveloped	Mixed
Strawberry Creek	5559	Developed	Residential
Strong Ranch Slough	4446	Developed	Mixed
Unionhouse Creek	2201	Mixed	Residential
Willow Creek	14570	Developed	Residential

Source: Section 7 "Hydrology and Water Quality", Draft EIR for Sacramento County 2030 General Plan (May 1, 2009)

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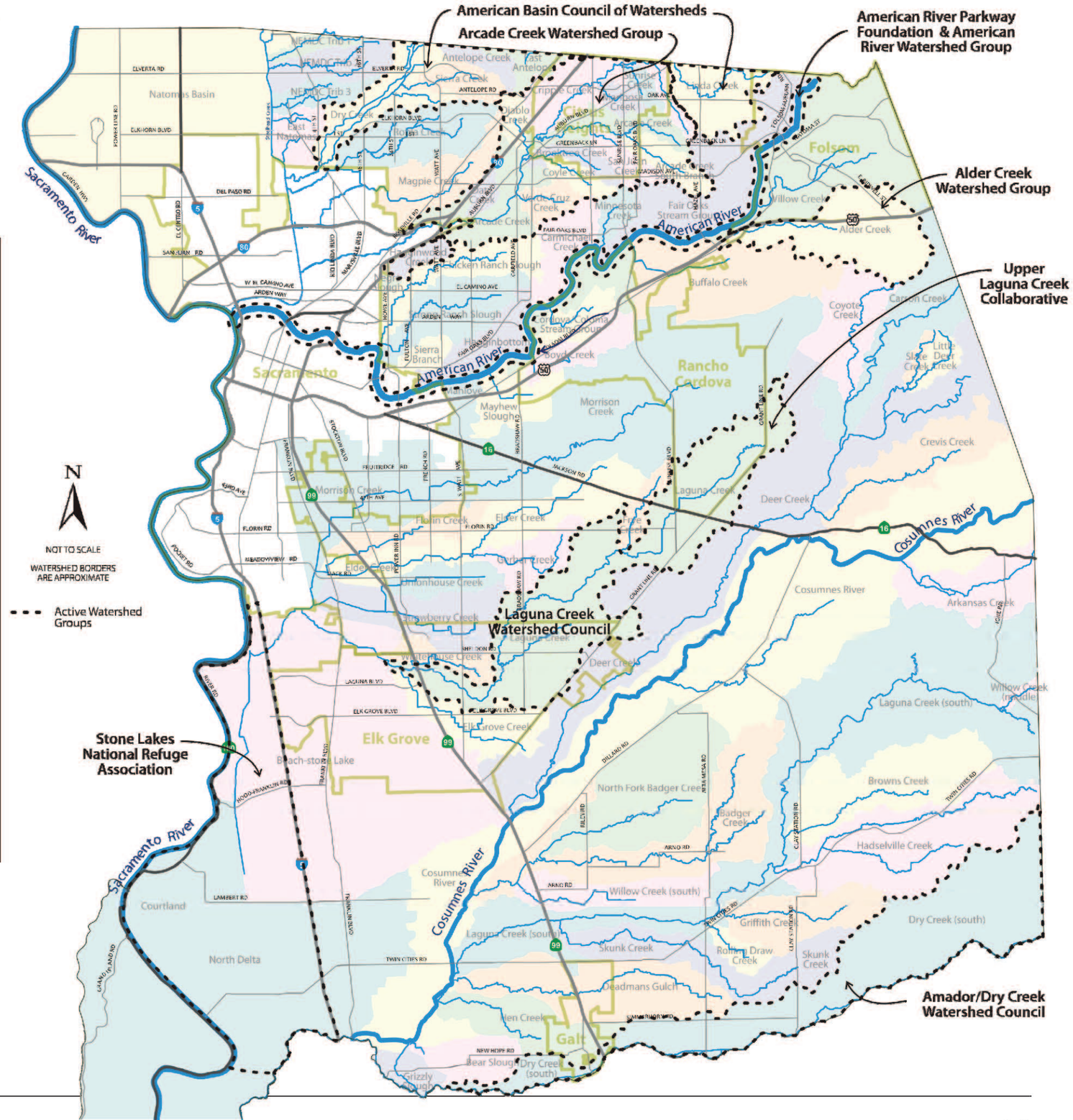
Figure 1.2-2
Sacramento Area Watershed Map

Active Watershed and Environmental Advocacy Groups

Watersheds/Groups	Permittee Involvement						
	Citrus Heights	Elk Grove	Folsom	Galt	Rancho Cordova	Sacramento City	County
Alder Creek Watershed Group			X				X
Amador/Dry Creek Watershed Council (Lower Dry Creek)				X			X
American Basin Council of Watersheds (Upper Dry Creek)							X
American River Parkway Foundation & American River Watershed Group	X				X	X	X
Arcade Creek Watershed Group	X					X	X
Laguna Creek Watershed Council		X			X	X	X
Sacramento River Watershed Program						X	X
Stone Lakes National Wildlife Refuge Association		X					X
Upper Laguna Creek Collaborative		X			X		X



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1.3 Overall Goals and Strategy

The overall goals of the SQIP, as identified in the Stormwater Permit are to: a) reduce the degradation of waters of the State and waters of the United States (U.S.) by urban runoff and protect their beneficial uses; and b) develop and implement an effective SQIP that is well understood and broadly supported by regional stakeholders. The core objectives of the SQIP are to:

- Identify and control those pollutants in urban runoff that pose significant threats to the waters of the State and waters of the U.S. and their beneficial uses;
- Comply with the federal regulations to eliminate or control, to the MEP, the discharge of pollutants from urban runoff associated with the storm drain system;
- Achieve compliance with water quality standards;
- Develop a cost-effective program which focuses on pollution prevention of urban stormwater;
- Seek cost-effective alternative solutions where prevention is not a practical solution for a significant problem; and
- Coordinate implementation of control measures with other agencies.

This SQIP outlines the strategies that will be utilized by the Partnership to meet these objectives. Chapter 2.3 describes the effectiveness assessments that will be completed by the permittees to determine progress toward permit compliance and meeting SQIP goals.

1.4 Overview of SQIP Implementation

Partnership and Individual Agency Activities

This SQIP includes Partnership (regional) activities that are implemented collectively by all the permittees as well as activities conducted by each permittee within its own jurisdiction (permittee-specific or individual activities). Each permittee helps fund Partnership activities and also provides staff and funding to conduct its own individual activities.

Partnership (Regional) Activities

Activities are implemented by the Partnership on a regional basis when that is most cost effective or is necessary to ensure a consistent approach to urban runoff management in the greater Sacramento area. Typically either the County or City of Sacramento (the two largest permittees) take the lead in implementing regional activities on behalf of the other permittees; the lead permittee serves as the main point of contact with the Regional Water Board and other regulators (e.g., EPA, State Water Resources Control Board). The permittees have entered into a memorandum of understanding (MOU) which defines responsibilities and cost-share arrangements for Partnership activities, as discussed in Chapter 2, Section 2.2.

The following major categories of activities are conducted jointly; refer to Chapter 2 for details about each:

- Program Management (under the leadership of a Steering Committee)

- Program Effectiveness
- Target Pollutant Program
- Monitoring Program (including Special Studies)
- Regional Public Outreach
- Regional Commercial/Industrial Program

Permittee-Specific (Individual) Activities

SQIP activities implemented by individual permittees primarily involve those related to the following seven program elements, presented here and in this SQIP in the order presented in the Stormwater Permit:

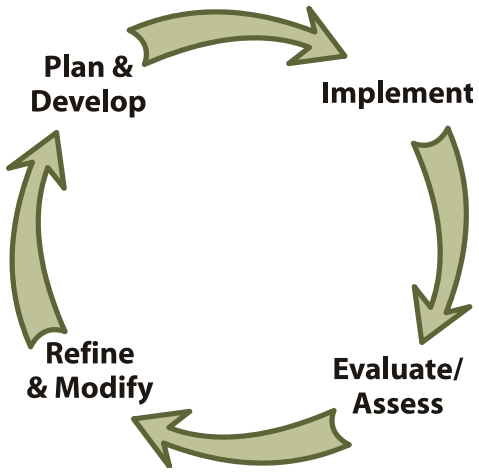
- Program Management
- Construction
- Commercial/Industrial
- Municipal Operations
- Illicit Discharges
- Public Outreach
- New Development

Specific program element activities differ from one agency to another according to each agency's internal structure, resources, and individual priorities and goals. However, the permittees strive for areawide consistency through inter-agency coordination and through joint development of brochures, manuals, and certain training programs. See Table 1.4-1 for examples of joint and individual activities.

Chapters 3-9 of this SQIP describe the individual permittees' activities for the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova.

Planning and Implementation Cycle

New and evolving regulations, knowledge from local and national studies and programs, and changes within the participating agencies' organizations and programs affect stormwater management priorities and direction. The SQIP, which serves as the blueprint for Partnership activities, must therefore also be dynamic. This SQIP is intentionally general in some areas to allow this flexibility. Decisions regarding funding and priorities will be made by the Partnership and the individual permittees on an annual basis and reported in the annual work plans and annual reports.



SQIP implementation is a dynamic, iterative process, based on the following annual sequence of events:

In the first step **(Plan and Develop)**, the Partnership and individual permittees plan and develop activities by describing them in the SQIP and annual work plans, which include priorities, schedules, and budgets for the upcoming fiscal year.

The second step **(Implement)** involves conducting the activities as outlined in the SQIP and annual work plans, including tracking and recording data to be used in the next step.

The third step **(Evaluate/Assess)** involves evaluating the effectiveness of the implemented activities. Chapter 2.3 describes the Partnership's effectiveness assessment approach.

In the fourth step **(Refine and Modify)**, activities are refined and modified based on the results of the effectiveness assessment. Some activities may get dropped off, or new activities adopted, during this phase. As specified in the Stormwater Permit, the annual reports submitted on October 1 each year will serve as the mechanism for proposing modifications to this SQIP for review and approval by the Regional Water Board.

Coordination with Other Agencies and Groups

Through the Steering Committee, the Partnership will continue to coordinate with other agencies and groups when implementing the SQIP. This chapter and each Permittee's SQIP (Chapters 3-9) describe coordination that will be undertaken as part of specific program elements/activities. There are many stakeholders in the permit area, including public agencies, environmental groups, business groups and others. The following is a non-exhaustive list of the main stakeholders (more complete lists can be found in applicable chapters where element/activities coordinate with non-Partnership stakeholders):

Federal Agency

- United States Environmental Protection Agency (USEPA), Region 9

National Organizations

- American Institute of Architects (AIA)
- American Society of Landscape Architects (ASLA)
- American Society of Civil Engineers (ASCE)

State Agencies

- State Water Resources Control Board (State Water Board)
- Central Valley Regional Water Quality Control Board (Regional Water Board)
- California Department of Pesticide Regulation (DPR)
- California Integrated Waste Management Board (CIWMB)
- California Structural Pest Control Board

State Organizations

- Associated General Contractors of California (AGC)
- California Stormwater Quality Association (CASQA)
- Consulting Engineers and Land Surveyors of California (CELSOC)
- California Building Industry Association (CBIA)

Local/Regional Organizations

- Local Watershed/Environmental Groups (see Figure 1.2-2)
- Regional Water Authority (RWA)
- Water Purveyors
- Sacramento Regional County Sanitation District (SRCSD)
- Sacramento Area Sewer District (SASD)
- Parks and Recreation Districts
- Sacramento Area Council of Government (SACOG)
- Local Utility Companies
- Schools/School Districts/Universities

Table 1.4–1
Examples of Partnership and Permittee-Specific Activities in the SQIP

Program Element	Objective	Primary Area of Responsibility/ Target Audiences	Examples of Permittee-Specific (Individual) Activities*	Examples of Partnership (Regional) Activities
Construction	Prevent sediment and other construction-related pollutants from entering the storm drain system and local waterways	• Construction sites at all stages of development from plan development to initial grading and through to the final close of construction • Contractors • Developers • Engineers • Erosion and Sediment Control Specialists • Agency inspectors, design engineers, and project managers	• Update and enforce ordinances for erosion and sediment control • Inspect construction sites to ensure compliance • Train and provide ongoing education for public agency inspectors, plan reviewers, and project managers • Coordinate with Regional Water Board regarding local construction projects	• Continue multi-agency coordination to review local use of new techniques for erosion and sediment control • Co-sponsor training workshops for construction community
Commercial/ Industrial	Reduce the discharge of stormwater pollutants to the maximum extent practicable and effectively eliminate illegal non-stormwater discharges from commercial and industrial facilities	• Retail and service businesses • Commercial/Industrial facilities • Activities conducted by public agencies and special districts	• Conduct complaint-based investigation and enforcement of illicit discharges from commercial and industrial facilities • Develop and distribute outreach to local businesses • Coordinate with public agencies and special districts	• Priority industry identification for categories of businesses subject to inspection and outreach • Inspect priority industries (conducted by County EMD inspectors with fees paid by regulated industries) • Develop brochures and BMP guidance materials for industries and businesses • Conduct outreach to priority industries
Municipal Operations	Control potential stormwater pollutants generated by agency-owned facilities and set an example of model pollution prevention to the public	Operation and maintenance of: • Agency- owned buildings, associated parking lots • Corporation yards • Transportation corridors and associated facilities • Stormwater and drainage pipelines, channels, detention basins, pump stations and other facilities • Agency-owned water supply facilities	• Maintain inventory of agency-owned facilities • Conduct annual refresher training for targeted agency staff • Provide technical assistance • Evaluate permit compliance of facility conditions and field activities	• Generally none

Program Element	Objective	Primary Area of Responsibility/ Target Audiences	Examples of Permittee-Specific (Individual) Activities*	Examples of Partnership (Regional) Activities
Illicit Discharge	Reduce the discharge of stormwater pollutants to the maximum extent practicable and effectively eliminate illicit non-stormwater discharges from non-commercial sources	• Non-commercial dischargers (residential primarily).	• Conduct complaint-based investigation and enforcement of illicit discharges • Respond to, contain and cleanup/abate illicit discharges and connections • Conduct ongoing field screening for illicit connections through routine maintenance activities being conducted by field crews • Conduct annual refresher training for affected agency staff	• Maintain public hotline for reporting of illicit discharges and connections • Conduct outreach to public by distributing educational materials • Conduct regional coordination as needed to respond to illicit discharges
Public Outreach	Educate the public on the impacts of stormwater and urban runoff pollution and encourage stewardship to protect local creeks and rivers	• Residents • Public officials and agency managers • Schools, including school districts, teachers, and school children • Businesses	• Sponsor stormwater booths at local community events • Distribute brochures and other educational materials in local communities • Install signs discouraging illegal dumping • Support environmental and water-based educational programs to increase awareness of pollution prevention, water conservation and watershed issues.	• Sponsor stormwater booths at regional community events • Develop brochures and other educational materials • Conduct public awareness surveys • Conduct mixed media campaigns focusing on specific messages • Conduct outreach to schools through SPLASH and classroom presentations • Maintain partnership website • Establish and maintain partnerships with groups and agencies to further public outreach mission
New Development	Mitigate urban runoff pollution and other stormwater impacts associated with new development and redevelopment	• Development and redevelopment projects • Developers • Engineers • Architects • Landscape Architects and Designers • Agency Staff, including planners, environmental analysts, field inspectors and design engineers	• Maintain and update development policies, procedures, codes and standards • Require compliance with development standards for new and significant redevelopment projects • Conduct training and provide ongoing education for public agency staff, such as planners and engineers	• Prepare and update regional technical guidance manuals • Educate and provide technical guidance to the development community • Conduct special studies to assess local effectiveness of selected new development BMPs (see Monitoring Section in Chapter 2)

**See Chapters 3-9 for a full listing of activities for each permittee*